Risk-Based Regulatory Process R&D

GRNS Meeting

October 2-3, 2001

Background

From the

- ***"Risk-Informed Approach" where deterministic and probabilistic approaches are mixed***

toward a :

- ***"Risk-Based Approach": in which decision-making is solely based on the numerical results of a risk assessment.***

Objective :

- ***to further reduce unnecessary conservatism or, on the contrary, to identify areas with insufficient conservatism.***

Status *(cf. NRC document Risk-Informed and Performance-Based Regulation - Mar-16-99**).***

- ***This tendency places heavier reliance on risk assessment results than is currently practicable for reactors due to uncertainties in PRA such as completeness.***
- ***Note that the NRC does not endorse yet an approach that is "risk-based"; however, this does not invalidate the use of probabilistic calculations to demonstrate compliance with certain criteria, such as dose limits.***
- ***The concept of the defense in depth will continue to be a fundamental tenet of the regulatory practice.***

Recommended :
The Risk-Based Regulatory Process R&D shall lead to improve the quality and the whole reliability of the PRA

Three main areas must be considered :

- ***PRA Modelling***
- ***PRA Comprehensiveness***
- ***Reliability modelling and data.***

⇨ ***The Risk and Safety CG will define the corresponding R&D plans***